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**SCHULZ et al.**(10) **Pub. No.: US 2019/0076795 A1**(43) **Pub. Date: Mar. 14, 2019**(54) **MASS-TRANSFER MACHINE**(52) **U.S. Cl.**(71) Applicant: **JULIUS MONTZ GmbH**, Hilden (DE)CPC **B01F 3/04531** (2013.01); **B01F 2003/04709**(2013.01); **B01F 2003/04645** (2013.01); **B01D****3/30** (2013.01)(72) Inventors: **Robin SCHULZ**, Kamen (DE); **Egon Zich**, Leichlingen (DE); **Helmut JANSEN**, Dormagen (DE); **Thorsten Erik Alexander HUGEN**, Essen (DE)

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In an apparatus for mass transfer between a liquid and a gas inside a rotor, the liquid is supplied to a center of the rotor and is driven outward by centrifugal force generated by rotation of the rotor; the gas surrounding the rotor is forced inward through the rotor by a pressure of the gas, counter to the liquid flow in the rotor, and the rotor has a plurality of passages lying in the plane of the rotor that begin at a center of the rotor and terminate at an outer circumference of the rotor. The passages are each filled with a packing that increases the area of contact between the liquid and the gas.

